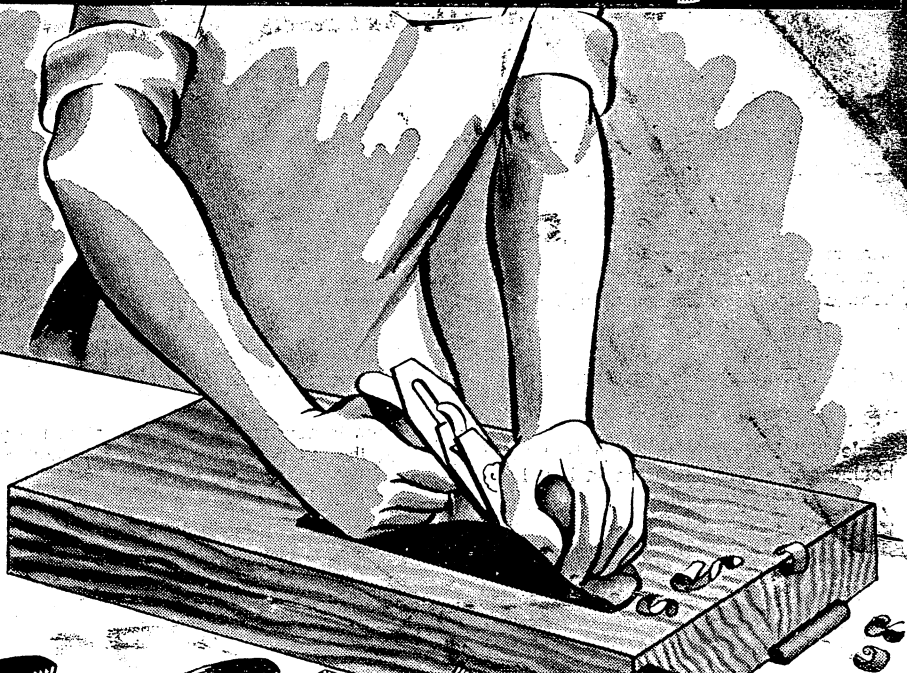
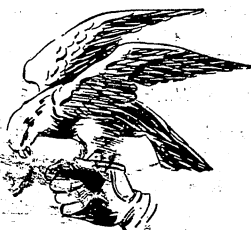


# Mints & Jins



## To Help You

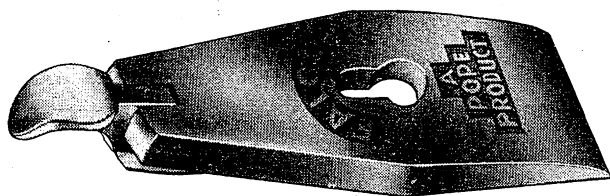
# FALCON



# PLANES

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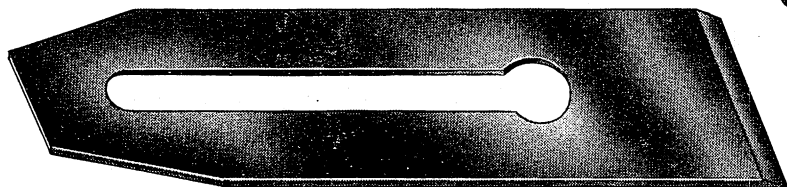
# The Inside S



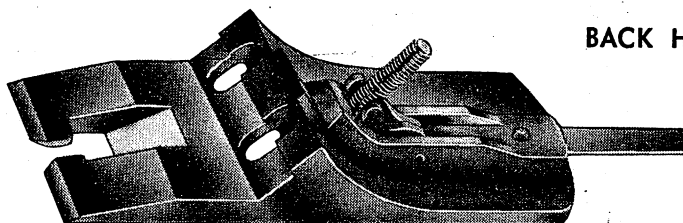
LEVER CAP



LEVER CAP  
SCREW

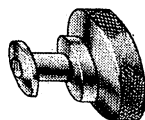


PLANE IRON

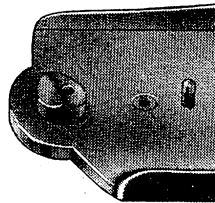


FROG

BACK H



ADJUSTING SCREW

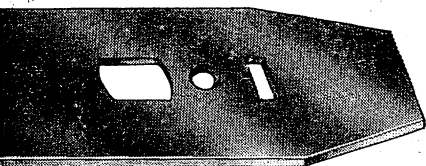


SCREW

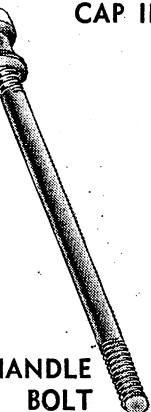


FROG CLIP

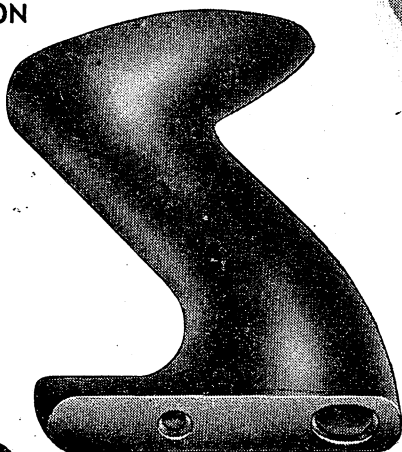
# Story



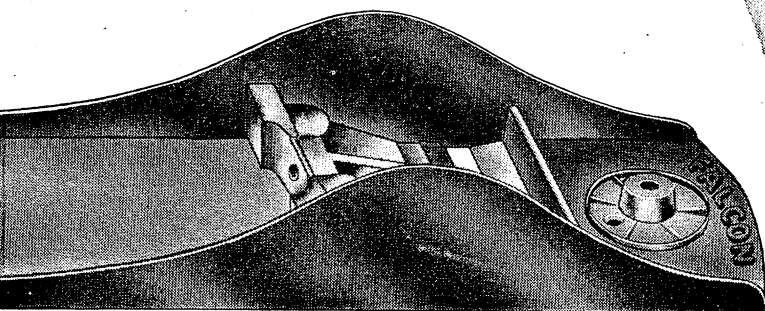
CAP IRON



HANDLE  
BOLT

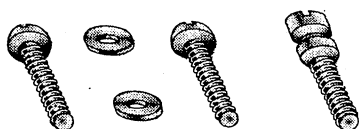


BACK HANDLE

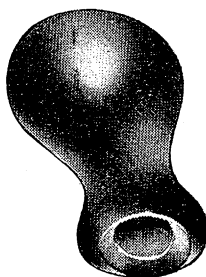


PLANE BOTTOM

VS



FRONT KNOB BOLT



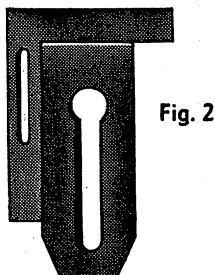
FRONT KNOB

# Shape of Cutting Edge

as shown in Fig. 2.

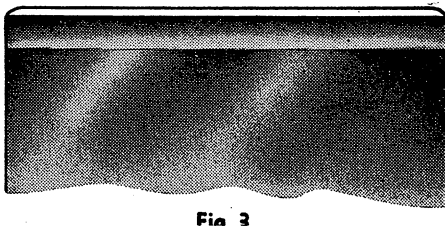
Firstly, the cutting edge should be checked for squareness

FIGURE 2.



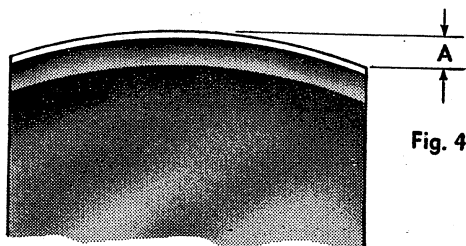
For smoothing work it is recommended to have a slight radius on the corners as shown in Fig. 3 so as to eliminate furrows. These furrows, of course, vary with the depth of cut.

FIGURE 3.



For a cut of considerable thickness, the cutting iron should be ground with a radius as shown in Fig. 4, the distance "A" varying with the depth of cut required; this distance is usually between 1/64" and 3/64".

FIGURE 4.



This edge is of course purely for roughing work.



# The most important point in the successful use of a plane is the correct sharpening and the adjustment of the cutting iron.

*If the following instructions are carried out hand planing could not be bettered.*

These planes when sent from the works are not ready for work, and the following instructions must be carried out before using the plane.

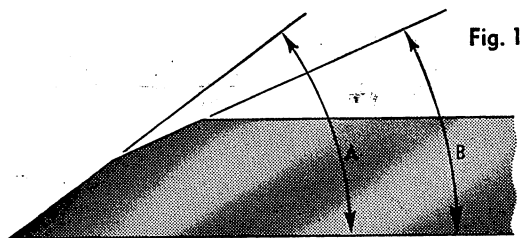
Remove Lever Cap and Cutting Iron, then dismantle cap iron and cutting iron in the following manner.

Loosen screw (with screw-driver—remember the lever cap was not made as a screw-driver), then slide cap iron down, the blade away from the cutting edge; now turn cap iron at right angles to the cutting iron and slide forward towards cutting edge until head of cap screw comes through enlarged end of slot in cutting iron.

If done in this manner damage of the cutting edge is avoided. To assemble cap iron, carry out the above instructions in reverse.

The cutting iron is now ready for sharpening, the grinding angle "B" having been ground at the factory, all that is necessary is the application of the honing angle "A" as shown in Fig. 1.

FIGURE 1.



A table of variations to these angles is given to assist the user when planing any quantity of similar timber.

TABLE 1.

| TYPE OF WORK | ANGLE "A" | ANGLE "B" |
|--------------|-----------|-----------|
| Hardwood     | 35°       | 30°       |
| Average Work | 30°       | 20°       |
| Softwood     | 30°       | 25°+      |

+ Cutting iron is supplied ex factory with this angle

The final whetting or honing of Angle "A" should be carried out on a CLEAN oil-smeared oil-stone.

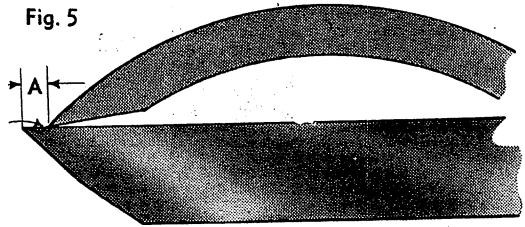
The blade must be held at a constant angle in relation to the oil stone and with an even pressure so as to ensure a true cutting edge.

After honing, a wire edge will be found on the cutting edge, this should be removed by holding the cutting iron flat on the oil stone and giving two or three rubs, making sure the iron is not raised at any time to give an opposite angle, so ruining the cutting angle.

## Setting of Cap Iron

The correct setting of the cap iron is a most important point for the attainment of good work, and should be set with care the distance "A" as shown in Fig. 5 should be set in relation to type of work shown in Table 2.

**FIGURE 5.**



**TABLE 2.**

| TYPE OF WORK                | "A"                                 |
|-----------------------------|-------------------------------------|
| Rough                       | Up to 1/16"                         |
| Finishing                   | Up to 1/64"                         |
| Very fine and for hardwoods | Irons should be almost edge to edge |

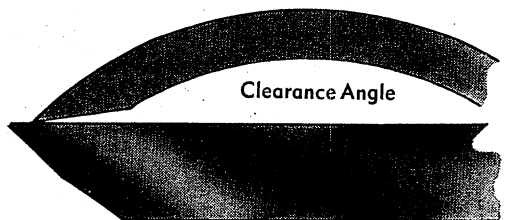
## Fitting of Cap Iron to Blade

The cap iron should be honed so that it has a sharp edge and fits snugly on cutting iron without gaps. Any gaps will make planing a most difficult task, as shavings will enter the gaps and clog the plane mouth. The correct fitting of the cap iron is shown in Fig. 6.

**FIGURE 6.**

Sharp close fitting edge

Clearance Angle



## Frog Adjustment (or Width of Mouth)

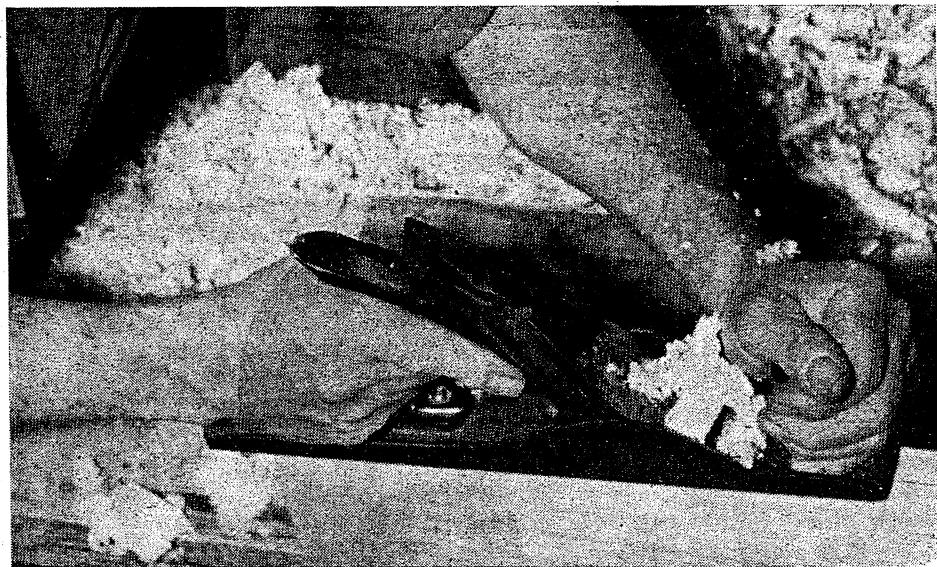
The effective width of mouth should go in direct proportion to thickness of cut, that is to say, for a very fine shaving, a fine mouth with a close-set cap iron will give ideal setting.

For coarse work, a wide mouth with coarsely set cap iron will be the ideal setting.

After grinding, honing, and setting the various components to suit the user's requirements, the cap iron and cutting iron should be replaced in the plane and the lever cap assembled, making sure the lever cap and cutting iron assembly beds down firmly on the frog so as to cut out any chatter.

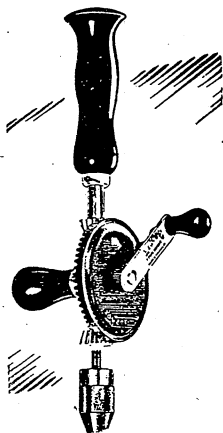
## Holding a Plane

The correct manner in which to grip a plane is shown in the accompanying illustration, which should be sufficiently self-explanatory.



Remember that to plane a piece of wood flat, pressure should be applied to the knob handle when commencing the cut, and pressure transferred to the back handle for finishing the cut. If this fundamental is not carried out, the work will finish with a hump. To make planing easier, the wiping of the base with a lightly oiled cloth every now and again will be found helpful (use neatsfoot oil—not mineral oil).

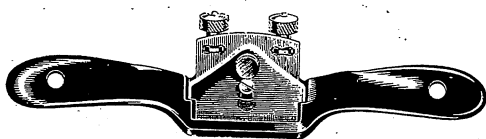
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